BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: August 20, 2014
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Christine Perron
Ron Crickard
Marc Laurin
Jon Evans
Jason Tremblay
David Scott
Mark Hemmerlein
Corey Spetelunas
Nancy Spaulding
Jason Abdulla
Erin Bourgoine
Kirk Mudgett
Carol Niewola
Tony Weatherbee
Dan Prehemo
Joe Adams
Pete Stamnas
Steve Liakos
Ron Grandmaison

EPA
Mark Kern

NH Fish & Game
Carol Henderson

NHDES
Gino Infascelli
Lori Sommer
Bill Thomas
Ridgely Mauck

Army Corps of Engineers
Michael Hicks

CLD Engineers
Jaime French
John Byatt

McFarland Johnson
Vicki Chase
Jed Merrow

Lebanon Airport
Rick Dyment

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:
(minutes on subsequent pages)

(When viewing these minutes online, click on a project to zoom to the minutes for that project)

NOTES ON CONFERENCE:

Finalization of July Meeting Minutes

The July 16, 2014 meeting minutes were finalized.

Pelham, X-A001(151), 16145

Jason Tremblay provided an overview of the project. The project will address the bridge that carries Main Street over Beaver Brook just east of the Pelham town center. The bridge is a twin stone arch constructed in 1839. The Main Street bridge is the second oldest stone arch bridge remaining in New Hampshire. The oldest is the Abbott Bridge, also in Pelham, located half a mile downstream of the Main Street bridge.

Each arch is 19', with a pier in the center, for a total bridge length of 46'. The bridge was added to the NHDOT Red List in 1988. The bridge was listed as scour critical in 2010 due to the potential scour depth and the unknown and unprotected footing at the pier. The calculated potential scour depth is 13.5'. The National Bridge Inventory status of the bridge is Structurally Deficient with a Federal Sufficiency Rating of 30.1%. In 1929, the bridge was widened to the downstream (south) side with steel I-beams and concrete. In 2012, the NHDOT Bureau of Bridge Maintenance filled voids in the stones with grout.

In 1988, an overflow pipe was replaced to the east of the Main Street bridge. Despite the presence of an overflow structure, flooding still occurs, with water overtopping the road during 100-year storm events. Two recent flood events in 2006 and 2007 have caused town officials to become very concerned about the Main Street bridge and the two downstream bridges constricting flow.

The purpose of the project is to address the Main Street Bridge (Bridge 110/090) over Beaver Brook to:

1) improve the hydraulic capacity of the crossing in a manner that does not exacerbate downstream flooding concerns;
2) remove the bridge from the NHDOT Red List by correcting structural deficiencies and deterioration;
3) resolve scour concerns.

The need for the project is apparent in the bridge's deteriorated condition, structural deficiencies, and inadequate hydraulic capacity. The deck and substructure are rated as poor condition, the bridge has an FSR of 30.1%, and the bridge is listed as scour critical. Furthermore, the Town of Pelham has substantial concerns regarding flooding.

At this time, four design alternatives are undergoing further study: bridge rehabilitation, installation of additional overflow structures, bridge bypass, and bridge replacement. Input on any potential natural resource concerns was being sought in order to inform the alternatives analysis.

Christine Perron summarized resources identified to date. Gove Environmental has completed a wetland delineation in the project area, as well as surveys for invasive plants and rare plants. Gove confirmed with the town that Prime Wetlands exist immediately downstream of the bridge and 175' upstream. Gove also confirmed the presence of river birch, a state listed species, upstream and downstream of the bridge. Two other rare plants were noted in the Natural Heritage Bureau database review, but the plant survey was completed outside the ideal window for identifying these two species. C. Perron will continue to coordinate with the Natural Heritage Bureau to determine the need for further surveys. This area has also been flagged for the presence of brook floater, a state listed mussel. Kim Tuttle and Mike Marchand at NH Fish & Game were contacted for input and did not think a mussel survey would be necessary as long as any mussels seen during construction are moved outside the work area.

Gino Infascelli commented that avoiding any impacts to Prime Wetlands, even temporary impacts, would be preferred. David Scott said that he anticipates the selected alternative to remain on the same alignment. G. Infascelli noted that Prime Wetlands appear to be immediately adjacent to both sides of the bridge. C. Perron replied that Gove discussed discrepancies in mapping with the town and confirmed that the upstream Prime Wetland is 175' from the roadway. As this seems unusual, she will continue coordinating with DES and the town on this issue as the project proceeds.

Mike Hicks asked if a hydraulic analysis has been completed. D. Scott replied that the town has contracted with VHB to pull together the HEC-RAS model from the Massachusetts border to a point significantly upstream of the Main Street bridge in Pelham.

M. Hicks asked if Bridge Design had an idea of what the preferred alternative would be. D. Scott replied that while a preferred alternative has not been selected, improving hydraulic capacity was going to be an important consideration for the project. The crossing could not just be opened up due to flooding concerns downstream, but the town is considering the installation of overflow structures at the bridge downstream. Cultural resource concerns also need to be taken into account. M. Hicks asked if a structure with controllable release of flow has been considered. D. Scott said that has not been discussed.

G. Infascelli asked if the Department had considered the installation of cross culverts under NH Route 38 to the east and south. D. Scott replied that this has been discussed but the preliminary analysis does not show much of a benefit during flood events.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Milford, X-A003(007)), 13692B

Nancy Spaulding began by providing a brief overview of the preliminary design aspects of the proposed project. This project is anticipated to involve the full depth reconstruction of NH Route 101 beginning at its intersection with Wilton Road and extending east approximately 2,900 feet to a point approximately 1,300 feet west of the NH Route 101/NH Route 101A/ North River Road Intersection. The proposed improvements are anticipated to include a slight lowering of the profile of the existing roadway and constructing two 12-foot travel lanes and a 12-foot center left turn lane. The westbound side of the roadway is anticipated to include the installation of a 5-foot shoulder and guardrail while the eastbound side would be constructed with a varying width shoulder of between 4 and 10 feet. The areas of 10-foot shoulder will act as an eastbound right turn lane. The project may also include the resurfacing of approximately 1,300 feet to the east of the full depth reconstruction limits, however would not include any excavation or work below or outside the limits of the existing pavement.

N. Spaulding and Jason Abdulla indicated that this project was originally designed with a 14-foot center left turn lane; however, this would have increased the impervious surface within the project area by 9,182 square feet. The original design also included a crown which was placed closer to the center of the roadway and would have increased the flow of stormwater entering into the existing drainage system. In an attempt to reduce the increase in impervious surface and flows entering the drainage system, the center turn lane was reduced to 12 feet in width and the crown of the roadway was shifted to the northern edge of the eastbound travel lane to increase sheet flow off the northern edge of the roadway. A drainage swale is also proposed between Stations 113+75 and 115+25, which would provide treatment of 13,772 sq. ft. of roadway. As a result of these design changes, the current proposal results in only a 3,466 sq. ft. increase in impervious surface, results in a 10,500 sq. ft. decrease in impervious surface area flowing into the existing drainage system, and provides treatment for an additional 13,772 sq. ft. of roadway.

Jon Evans indicated that this project has been particularly challenging for the Department given the proximity of the Souhegan River to the north of the roadway and the large number of businesses on the southern side of the roadway. He reiterated that the Department must keep all impacts within the limits of the existing right-of-way. Ron Grandmaison noted that the Department has put a substantial amount of effort into looking at ways to reduce or even improve the existing and proposed roadway runoff features within the project area while remaining within the original project scope. J. Evans indicated that the main purpose of this meeting was to hear if the any of the agencies, particularly the NHDES Alteration of Terrain Bureau, had any comments or concerns regarding the proposed project.

Ridge Mauck indicated that while sheet flow is not typically considered a viable treatment option, utilizing sheet flow when possible is still preferable to collecting the water and discharging directly into nearby surface waters such as the Souhegan River. He indicated that he understood the constraints of the project area and that many of the typical water quality treatment measures would not be possible given the constraints of this project area. He asked that the Department look into and incorporate any other possible bio-retention or infiltration measures such as tree box filters and other Low Impact Development (LID) measures that might fit into the areas where the existing landscape islands are on the southern side of the road. Lori Sommer suggested looking at some of the treatment measures that were proposed along NH Route 101 in association with the Bedford 13953 project.

J. Evans indicated that the wetlands within the project area still needed to be delineated, although given what he has seen at the site so far and given the limited scope of the project he anticipated very little, if any wetland impact associated with this project. He acknowledged that a Shoreland permit would likely be necessary. Gino Infascelli suggested that the Department check the existing drainage outlets to make sure that there weren't any maintenance needs that should be addressed by this project.

J. Evans asked if anyone, particularly R. Mauck, felt there was a need to see the project again prior to construction. It was agreed that the project would not need to be reviewed again. R. Mauck indicated that no further approvals were necessary from the AOT Bureau however he encouraged the Department to continue to look for and incorporate any viable additional water quality treatment measures into the design of the project. He encouraged the Department to continue to review any potential water quality treatment measures with Mark Hemmerlein who would coordinate directly with him as necessary.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Candia-Epping, X-A003(376), 26606

Kirk Mudgett provided an overview of the project. The project is located on NH Route 101, beginning 150' west of the Candia/Raymond town line and continuing east approximately 5.9 miles to 250' east of the Raymond/Epping town line. Work will consist of paving, drainage repairs, bridge repairs at 8 bridges, sign replacement, and ledge scaling. Temporary median crossovers will be required during construction; no crossovers will result in wetland impacts. Approximately 9,000 linear feet of underdrain will be replaced.

Four cross pipes will be addressed:

1) 60" corrugated metal pipe located 750' east of Candia town line. The pipe is 17' deep and has a drainage area of 76 acres. The invert of the pipe is pitted and sliplining with a plastic liner is proposed. Stone fill will be required at the inlet and outlet for work platforms and scour protection. During construction, water diversion at the inlet will be necessary, and a cofferdam at the outlet will be needed. The existing velocity through the pipe is 10.3 ft/sec. The proposed lining

will result in a velocity of 17 ft/sec. The pipe is approximately 268' in length with a 2% slope. The pipe carries an intermittent stream and is a Tier 1 Stream Crossing.

2) 48" bituminous coated corrugated steel pipe located 1000' east of Green Road. The pipe is 73' deep and has a drainage area of 167 acres. The invert of the pipe is pitted and sliplining with a plastic liner is proposed. Stone fill will be required at the inlet and outlet for work platforms and scour protection. During construction, water diversion at the inlet will be necessary, and a cofferdam at the outlet will be needed. The existing velocity through the pipe is 9.8 ft/sec. The proposed lining will result in a velocity of 16.5 ft/sec. The pipe is approximately 461' in length with a 2% slope. The pipe carries a perennial stream and is a Tier 1 Stream Crossing.

3) 24" corrugated metal pipe located ½ mile west of Old Manchester Road. The pipe is 13' deep and has a drainage area of 3 acres. The invert of the pipe has rusted out and sliplining with a plastic liner is proposed. The pipe is part of the closed drainage system and actually consists of two 24" pipes on either side of a catch basin. Stone fill will be required at the inlet and outlet for work platforms and scour protection. During construction, water diversion is not anticipated since the pipe is usually dry. The existing velocity through the pipe is 9.7 ft/sec. The proposed lining will result in a velocity of 15.9 ft/sec. The pipe is approximately 252' in length. One pipe is on a 4% slope, and the other pipe is on a 7% slope. The pipe is located between two palustrine wetlands and does not carry a stream.

4) 66" corrugated metal pipe located 1400' west of Old Manchester Road. The pipe is 45' deep and has a drainage area of 156 acres. The invert of the pipe is pitted and sliplining with a plastic liner is proposed. Stone fill will be required at the inlet and outlet for work platforms and scour protection. During construction, water diversion at the inlet will be necessary, and a cofferdam at the outlet will be needed. The existing velocity through the pipe is 5.8 ft/sec. The proposed lining will result in a velocity of 9.8 ft/sec. The pipe is approximately 356' in length with a 0.45% slope. The pipe carries a perennial stream and is a Tier 1 Stream Crossing.

Wetland impacts at the cross pipes will consist of temporary impacts for construction access and BMPs, and small areas of permanent impact for the placement of stone for scour protection at the inlet and outlet.

Bridge work will entail partial depth deck repair and joint work on 8 bridges within the project limits. The eastbound bridge over the Lamprey River requires concrete repairs at the middle pier, requiring temporary impacts to the river for construction access and water diversion. To accomplish the bridge deck repairs, crossovers and temporary widening will need to be constructed to keep two lanes in each direction.

Lori Sommer asked about the lifespan of a sliplined pipe. K. Mudgett replied that the lifespan is typically 50 to 100 years, based on the lifespan of plastic pipe.

Christine Perron stated that the Natural Heritage Bureau database review indicated that Blanding's turtle, spotted turtle, and Northern black racer have been documented in the project area. She recently started coordinating with Kim Tuttle at NH Fish & Game to determine if the proposed work raises any concerns. However, the cross pipes are all very long with a small diameter, so it seemed unlikely that they provide much benefit to turtle passage currently. She indicated that she would follow up with Kim Tuttle by providing a copy of the slides shown at today's meeting, and that she would copy Carol Henderson on the email.

C. Henderson commented that there may be concerns with the timing of work in the Lamprey River, and Cheri Patterson in the Marine Division may ask for time of year restrictions. C. Perron noted that she would continue coordinating with Fish & Game on this issue.

Mike Hicks asked if any roads would need to be constructed for construction access. K. Mudgett replied that no access roads would be needed other than the temporary median crossovers.

M. Hicks commented that the Lamprey River is a Wild & Scenic River. C. Perron clarified that the Wild & Scenic designation starts to the east of the project area. Subsequent to the meeting, she confirmed that the designation begins approximately 1.5 miles downstream of the project at Bunker Pond in Epping. The river through the project area is a NH Designated River, and project information has been sent to the Local Advisory Committee.

C. Perron noted that the project is currently scheduled to advertise in November, so the permit application would be submitted in the near future.

M. Hicks asked about the schedule for construction. K. Mudgett said that the project is expected to require two seasons to construct, with a start date in early April.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Francestown, non-federal, 15764

Jaime French presented an overview of the project. The existing structure is a 12-foot corrugated metal pipe arch that was constructed in 1977. Due to the condition of the pipe arch, the NHDOT recommended that the road be closed in December 2012, and it has been closed since that date. The project will consist of replacing the pipe with a span structure. The engineering study phase has been completed and preliminary design has started. Construction is anticipated for Summer 2015, with advertising and bidding this winter, and the wetland permit application will be submitted late September. In addition to the poor condition of the pipe arch, it was also determined that the pipe is hydraulically undersized and constricts the flow of the brook. Several options have been evaluated that meet the hydraulic criteria: 20-foot concrete rigid frame; 32-foot concrete arch; 43-foot concrete NEXT beam; and 43-foot timber bridge. To conform to the stream crossing rules, the minimum span would be 43-feet, based on a bankfull width of 34 feet. The selected alternative is the 43-foot concrete NEXT beam, with a total project cost of $761,500. The shorter span did not provide enough cost savings to justify not meeting the stream crossing rules, and the NEXT beam was found to be more economical than the timber bridge. The total estimated project cost for the 20-foot rigid frame is $748,500. The 43-feet is measured from face of abutment to face of abutment perpendicular to the stream; since the roadway and bridge will be skewed 14-degrees, the span length is 47-feet measured along the centerline of construction. The bridge was placed to match into the existing slopes as much as possible and to avoid a nearby tree farm access road. Once the existing pipe is removed, the banks will be sloped back and a 2-foot level area in front of each abutment will be provided. All permanent bridge components will be within the existing right-of-way.

There will be wetlands impacts associated with the pipe removal and the slope and channel work for the new structure. The approximate permanent wetland impacts are 670 square feet. A Natural Heritage Bureau review has been completed; the review found that wood turtle and Blanding's turtle are in the vicinity of the project.

Bill Thomas asked if the project would comply with the NHDES Stream Crossing Rules. J. French said it would be compliant.

Mike Hicks asked if opening up this crossing would cause any downstream flow issues. J. French said she believed this was checked but would confirm after the meeting. Subsequent to the meeting, it was determined that the downstream crossing would not be affected.

Gino Infascelli noted that Brennan Brook is within a ¼ mile of the Piscataquog River, a NH Designated River. B. Thomas added that coordination would be needed with the Local River Advisory Committee.

Carol Henderson said that John Magee noted that Brennan Brook is a wild trout brook and this would be a concern for fall construction. There were no concerns with the proposed summer construction. C. Henderson also asked if there would be a shelf for wildlife to pass under the span. J. French noted that during normal flows the top of the stone fill would be exposed and there would be a 2-foot level area in front of each abutment.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Francestown, non-federal, 15762

Jaime French presented an overview of the project. The existing structure is a 12-foot corrugated metal pipe arch that was constructed in 1975. Due to deterioration, the condition of the pipe arch is serious. As this bridge is located on a dead end road, the pipe arch needs to be replaced before the condition warrants closing the road. The project will consist of replacing the pipe with a span structure. The engineering study phase has been completed and preliminary design has started. Construction is anticipated for Summer 2015, with advertising and bidding this winter, and the wetland permit application will be submitted late September. In addition to the poor condition of the pipe arch, it was also determined that the pipe is hydraulically undersized and constricts the flow of the brook. Several options have been evaluated to meet the hydraulic criteria: a 20-foot and 32-foot concrete rigid frame; 32-foot concrete NEXT beam; and 32-foot timber bridge. To conform to the stream crossing rules, the minimum span would be 32-feet, based on a bankfull width of 24.5 feet. The selected alternative is the 32-foot concrete rigid frame, with a total project cost of $869,500. The shorter frame did not provided enough cost savings to justify not meeting the stream crossing rules. The total estimated project cost for the 20-foot frame is $847,500. The existing road is gravel, so providing a buried structure allows the gravel road to continue without interruption and will make future roadway maintenance easier. The bridge was placed to match into the existing slopes as much as possible and to avoid extensive re-grading upstream and downstream. Once the existing pipe is removed, the banks will be sloped back. All permanent bridge components will be within the existing right-of-way. As Juniper Hill is a dead end road, a temporary bridge will be provided to maintain traffic. The bridge type would be determined by the contractor, but it would be shown in the wetland permit application as temporary pipes set in the brook. Geotextile fabric could be placed in the brook to help with the removal of temporary materials.

There will be permanent wetlands impacts associated with the pipe removal and the slope and channel work for the new structure. The approximate permanent wetland impacts are 1,090 square feet. The approximate temporary wetland impacts are 525 square feet for the temporary bridge. A Natural Heritage Bureau review has been completed; the review found that wood turtle is in the vicinity of the project.

Bill Thomas asked how long the temporary bridge would be in place. J. French said it would be approximately 10 weeks. B. Thomas said that a temporary bridge could be constructed using pipes and fill in the stream. He added that it is preferred that the plans show other possible temporary bridge options that the contractor might build so that it is in the wetland permit and that the permit would not need to be amended. J. French said that options could be shown and the permit would reflect the worst case for temporary wetland permits. B. Thomas said that it needs to be shown that the temporary pipes can handle the normal flow; the longer the temporary pipes are in place, the more the sizing becomes a concern. J. French noted that the intent was to stipulate in the plans that the pipe provide an opening area equal to the existing structure. Steve Liakos noted that the temporary pipes should be able to pass a 10-year flood event.

B. Thomas noted that Fish & Game may have more concerns about potential impacts to turtles given the upland impacts required for the temporary detour.

Carol Henderson said that all in-water work should be completed prior to October 1 due to possible wild trout impacts. She also asked if there would be a shelf for wildlife to use to pass through the bridge. J. French noted that during normal flows the top of the stone fill would be exposed and there would be a 2-foot level area in front of each leg of the frame.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Lebanon Airport, 3-33-0010-47-2012

The project was previously reviewed on June 19, 2013. The project involves obstructions to navigable airspace at Lebanon Airport. As proposed, the project involves 34 acres of tree removal south of Runway 25, removal of 38 obstruction lights, a perimeter fence to be relocated, and two hazard beacons to be erected. The trees and fence are penetrations to FAR Part 77 surfaces. In the area proposed for tree removal, there are ground penetrations of navigable airspace that will not be removed. There are also obstructions off airport property that will not be addressed. The sequence of projects is dictated by the need for a fence to always be in place and for obstructions to always be lit. The proposed sequence is:

1) Beacon installation - fall 2014
2) Obstruction light removal - fall 2014
3) 34 acres tree removal - winter 2014-2015
4) Fence installation and removal – service road construction- spring 2015
5) Stump grinding in wetlands and uplands - winter 2015-2016

Stump grindings will be spread around in place.

Forested wetland will be converted to scrub shrub and emergent wetland. Impacts to wetlands and uplands within 100 feet of intermittent streams were calculated separately. A conservation easement within the tree clearing area will also be cleared. The easement language allows for FAA required activities and structures. The westerly hazard beacon will require wetland impacts in order to provide access for construction equipment and for long-term maintenance along the power lines.

Wetland mitigation had been discussed at the June 2013 meeting and is summarized in the table below. Conversion impacts were calculated as partial impacts to wetlands and upland tree buffers, resulting in a "Mitigation obligation" of 2.00 acres.

Mark Kern commented that the mitigation for wetland conversion is more typically 15% rather than 10%, and that he had consulted with Paul Minkin and Ruth Ladd who had agreed that there was precedence for 15%.

Proposed Wetland Impacts and Mitigation Obligation

DIRECT IMPACTS	Perm.	Conversion (no Dredge or Fill)	TOTAL	Mitigation Ratio	Mitigation Obligation (Square Feet)	Mitigation Obligation (Acres)
Access for Beacon Installation	1,004		1,004	100%	1,004	0.02
Road construction / fence	15,642		15,642	100%	15,642	0.36
Drainage structure installation	13		13	100%	13	0.00
Wetland Tree Clearing (Veg Type Conversion)		137,004	137,004	10%	13,700	0.31
Wetland Tree Clearing within 100' of streams		145,700	145,700	15%	21,855	0.50
Total Mitigation Obligation for Direct Impacts	**16,659**	**282,704**	**299,417**		**52,214**	**1.20**
SECONDARY IMPACTS						
Upland Land Clearing within 100' of Streams	348,998		348,998	10%	34,900	0.80
TOTAL MITIGATION OBLIGATION (ACRES)						**2.00**

The in-lieu fee using these ratios and using the 2013 calculator would be $368,746. If land preservation were used instead, using both the Army Corps and NHDES guidance, 30 acres would be required to be preserved. MJ and the Airport in conjunction with the Upper Valley Land Trust (UVLT) have located a 34-acre parcel on Etna Road that seems to meet the requirements, having good conservation value, wildlife habitat, and vernal pools. The seller is cooperative, and a refundable deposit is being placed on the property on August 22, 2014.

M. Kern asked how much of the property is developable, because threat of development is a factor for preservation parcels for mitigation. Vicki Chase responded that the appraised value is over $100,000, so there must be some development value, and that it is in a coveted part of the city. Lori Sommer commented that this was an area the UVLT had been focusing on for preservation. Rick Dyment commented that there is other commercial and residential development in the vicinity, indicating that there is a threat of development.

M. Kern asked how many vernal pools are on the property. V. Chase responded that she hoped to make a site visit during the week of August 25, 2014 to provide the additional documentation required by NHDES for the wetland application. M. Kern commented that there didn't seem to be a great deal of wetland on the parcel, but that perhaps there were drainages on the hillside.

L. Sommer provided some background on the recently preserved adjacent parcel, the Rix Ledges parcel, which was preserved as mitigation for a private development.

V. Chase provided a review of permit status to date.

- NHDES Alteration of Terrain – *Permit received*
- NHDES major impact wetland permit for wetland impacts and land conversion – *Submitted June 2014*
- ACOE individual permit – *Submitted August 2014*
- 401 Individual Water Quality Certification – *Submitted June 2014*
- NEPA approval – Environmental Assessment – *Draft EA in August 2014; Final EA and FONSI anticipated in September 2014*

M. Kern was not clear that it had been determined that it needed to be an individual permit. Rich Roach determined that it needed to be an individual permit, because the PGP states that an individual permit is required for ">3 acres waterway and/or wetland fill and secondary impacts, (e.g., area drained, flooded, cleared, excavated or fragmented)."

Mike Hicks plans to issue the public notice by mid-September 2014. The construction windows and sequence require that construction start by the end of October 2014.

M. Hicks asked if there were plans to extend the runways or approaches. R. Dyment responded that there were no such plans for this runway. Because the EA for improvements to the other runway (Runway 18-36) was not approved, there are currently no plans for the other runway.

The proposed mitigation parcel will be owned in fee by the Upper Valley Land Trust with funds provided by FAA. Adjacent parcels are owned in fee by UVLT, but the land transfer has not been finalized. FAA will not purchase the parcel before receiving the permit, so it is hoped that the permit will provide conditions including a date by when the parcel transfer would occur.

The Airport will contract with a logging company to remove all the trees on the airport property. Because the tree-removal will be a fast-paced operation, it will likely be a large company with several pieces of equipment. Sales from the timber will provide revenue to the Airport to offset the cost of hiring the logging contractor.

This project was previously reviewed on the following date: 6/19/2013.

Boscawen, non-federal, 29279

Tony Weatherbee provided an overview of the project. The scope of the project is to rehab the bridge that carries US Route 4 over Tannery Brook (Bridge 107/122). Proposed work consists of placing temporary scaffolding in the river, replacing the concrete deck in kind, repairing abutments and wingwalls, and placing riprap in front of the wingwalls and abutments.

Carol Henderson asked if there was already riprap on location. T. Weatherbee said that there was no visibility to the bottom of the brook, but it is assumed that there is riprap. C. Henderson asked if debris would be caught during construction. T. Weatherbee replied that scaffolding with timber beams and plywood would be used to catch debris and it would be cleaned off before debris could accumulate.

Christine Perron asked if there would be new permanent impacts. T. Weatherbeen answered no, that the work would be within the same footprint as the existing structure.

C. Henderson asked if cofferdams would be used. T. Weatherbee said that sandbag cofferdams would be used to dewater for the riprap installation and concrete facing. The extent of dewatering depends on the amount of water in the brook at the time of construction. C. Henderson stated that Fish & Game preferred

that there be some continued flow through the brook during construction, and that work in the water should occur before October 1st when possible.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Boscawen, non-federal, 29277

Tony Weatherbee provided a brief overview of the project. The scope of the project is to rehabilitate the bridge that carries US Route 4 over Tannery Brook (Bridge 111/117). Proposed work consists of placing temporary scaffolding in the river, replacing the concrete deck in kind, repairing abutments, replacing wingwalls, and placing riprap in front of the wingwalls and abutments.

Lori Sommer said that she had no concerns with the proposed permanent impacts.

There were no concerns with the project as proposed.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Newington-Dover, NHS-027-1(37), 11238

There being no representation from Tendercrop Farm, the City of Dover, nor the Strafford River Conservancy, the recent correspondence to and from Tendercrop Farm, the City of Dover and the Dover Conservation Commission was reviewed.

The discussion focused on outstanding information that should be provided for the Resource Agencies to complete their assessment of Tendercrop Farms' proposal:

1) Mark Kern asked for updated map of the proposed work that shows fencing locations, as it is important that cattle be restricted from the wetland areas.
2) Gino Infascelli pointed out that he did not find any recent filings with the Wetlands Bureau for any of the wetland crossings necessary to accomplish the proposed forestry operations.
3) It was noted by Carol Henderson that answers to watering and manure managements were not adequately answered by Tendercrop Farm in response to City of Dover comments.
4) M. Kern was concerned that a 100-foot buffer to the tidal area has not been met and that a larger buffer to the freshwater wetlands should be established.
5) G. Infascelli pointed out that any work within the Tidal Buffer Zone would also require a Wetlands Bureau permit and it seems that a shoreland permit could be needed.
6) Lori Sommer stated that the maps need to be updated, that permits need to be filed, and that the appropriate regulations be cited in the management plan to clarify what is allowable or permittable for agricultural usage.
7) M. Kern also requested that best management practices be followed and baseline documentation be provided.

Marc Laurin will contact Tendercrop Farm and the City of Dover to discuss were their proposal stands and that further information be provided.

This project was previously reviewed on the following dates: 4/16/2003, 7/16/2003, 4/21/2004, 6/23/2004, 1/19/2005, 4/20/2005, 7/20/2005, 8/17/2005, 11/2/2005, 12/14/2005, 2/21/2006, 3/21/2007, 10/15/2008, 8/19/2009, 8/17/2011, 3/21/2012, 3/19/2014, 6/18/2014

Salem-Manchester, IM-IR-93-1(174)0, 10418C

Dan Prehemo gave a brief description of the proposed I-93 crossings of Beaver Brook in Derry. The existing box culverts do not meet the criteria for passing the 100-year flood. Additionally, Peter Stamnas stated that due to structural and hydraulic issues, these structures will need to be replaced rather than widened as initially proposed. A conceptual plan of the design of the bridges, which takes into account the stream crossing guidelines, was presented. The bridges will be provided with 52-foot clear spans to accommodate the 1.2 x bankfull + 2 foot width. The natural channel bottom will be 32 feet in width and the banks will have 2:1 slopes. Stone fill will extend from the banks to the abutments. Five and a half foot shelves (on 10:1 slopes) will be provided from the normal high water mark to the bankfull width on both sides of the channel. From these shelves to the abutments, the slope will be 2:1. About 9 feet of clearance will be provided over the shelves. Marc Laurin stated that wildlife fencing is being considered within the median and along the uplands adjacent to the bridges to deter wildlife from entering onto the I-93 travel way. Carol Henderson will bring the fencing concerns back for review with NH Fish & Game staff. An electronic version of the concept was subsequently forwarded for their use.

Discussion of the status of the existing I-93 mitigation package and how this relates to the new wetland permit ensued. M. Laurin stated that the impacts for completion of the widening of I-93 from Salem to Manchester (excluding south of Exit 1 to the State Line, which cannot be completed until a widening project is developed in Massachusetts) will total 86.9 acres. This is approximately 11 more acres of wetland impacts than the 75.7 acres permitted. About 8 acres of these impacts are from more refined wetland delineations during final design (the scope of work did not increase); the other 3 acres are from shifts in the alignment in areas where the scope changed.

Mark Kern discussed the appropriateness of certain protected areas in the existing mitigation package. He pointed out that some sites are small isolated parcels that were promoted by the Towns and he is of the opinion that the overall mitigation fell short. He stated that a lot of these areas are not sustainable. He would have preferred protection of larger ecologically significant areas. EPA's response to the SEIS encouraged that mitigation be provided for additional wetland impacts, preferably through an in-lieu fee payment. M. Laurin provided M. Kern with a copy of a powerpoint presentation, previously discussed with DES and the Corps, that assesses the wetlands impacted and the functions and values mitigated by mitigation package. P. Stamnas pointed out that part of the mitigation package is $3 million provided to the DES Watershed Land Grant Program. Although only about $300,000 has been used to date, the requirements have been recently changed and, as a result, Lori Sommer stated that she feels that more towns will now apply for the grants. As the DES permit expires in 2016, P. Stamnas described the on-going coordination with DES in applying for a new permit for the remaining impacts to complete the corridor widening. He anticipates submission of the permit application in the fall.

M. Kern has discussed with the Corps their permitting of the remaining wetland impacts. As the Corps will be amending the existing permit, the EPA will just provide comments to the Corps on this amendment. He stated that the 2010 letter on the SEIS from the EPA would still be valid. L. Sommer will meet with the Corps and the EPA to provide a response to DOT on the mitigation. M. Laurin will compile a CD with the easements and deed restrictions for L. Sommer.

This project was previously reviewed on the following dates: 8/10/1995, 1/10/1999, 2/16/2000, 5/17/2000, 6/14/2000, 7/19/2000, 8/10/2000, 9/20/2000, 10/18/2000, 1/17/2001, 2/14/2001, 3/21/2001, 4/18/2001, 5/10/2001, 8/15/2001, 9/19/2001, 10/17/2001, 11/21/2001, 1/16/2002, 2/20/2002, 5/15/2002, 6/18/2003, 10/15/2003, 12/17/2003, 10/20/2004, 11/17/2004, 1/18/2006, 12/19/2007, 2/20/2008, 10/15/2008, 11/19/2008, 12/17/2008, 1/21/2009, 2/18/2009, 4/15/2009, 5/20/2009, 7/15/2009, 8/19/2009, 10/29/2009, 1/20/2010, 2/17/2010, 3/17/2010, 5/19/2010 , 7/21/2010, 9/15/2010, 12/15/2010, 5/18/2011, 6/15/2011, 8/17/2011, 8/15/2012